

**UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF TEXAS  
AUSTIN DIVISION**

THROUGHPUTER, INC.,

Plaintiff,

v.

AMAZON WEB SERVICES, INC.,

Defendant.

Case No. 1:22-CV-01095-RP

**JURY TRIAL DEMANDED**

**PLAINTIFF'S OPPOSITION TO DEFENDANT'S MOTION TO DISMISS**

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Plaintiff ThroughPuter, Inc. (“ThroughPuter”) respectfully submits this opposition to Amazon Web Services, Inc.’s (“AWS”) Motion to Dismiss Under Rule 12(b)(6) for Failure to State a Claim (the “Motion”). Dkt. 20. For the reasons set forth below, ThroughPuter respectfully submits that the Court should deny AWS’s Motion in its entirety.

## I. INTRODUCTION

ThroughPuter’s Complaint (Dkt. 1) accuses AWS of infringing U.S. Patent Nos. 11,347,556 and 11,385,934 (collectively, the “Patents-in-Suit”). ThroughPuter alleges that the Patents-in-Suit include claims that are substantially identical to claims of U.S. Patent Nos. 10,282,330 and 10,223,317 respectively, which are owned by Amazon (the “Amazon Patents”). Despite the picture AWS’s Motion attempts to paint, ThroughPuter’s Patents-in-Suit claim a priority date that is *three years earlier than the earliest priority date* of the Amazon Patents. Thus, the Patents-in-Suit were conceived of and constructively reduced to practice three years prior to the Amazon Patents. In other words, ThroughPuter disclosed its claimed inventions to the world years before the applications that resulted in the Amazon Patents were filed. As a result, ThroughPuter’s Patents-in-Suit came first and are prior art to the Amazon Patents. Any contrary picture painted by AWS is simply not true.

In its Motion, AWS admits that the scope of the claims of the Patents-in-Suit and the scope of the claims of the Amazon Patents are substantively the same and that any differences in claim language between the Patents-in-Suit and the Amazon Patents are merely “superficial.” This admission creates a problem for AWS: because it appears that AWS is practicing the claims of the Amazon Patents, it is also practicing (*i.e.*, infringing) the Patents-in-Suit given the substantial identity between the claims of the Patents-in-Suit and the claims of the Amazon Patents.

The admitted substantial identity between the claims of the Patents-in-Suit and the Amazon Patents creates another problem for AWS: if AWS were to argue that the claims of the Patents-in-

Suit are invalid under 35 U.S.C. §§ 102 and/or 103, AWS would, in essence, be arguing that the Amazon Patents are similarly invalid. Similarly, if AWS were to argue that the Patents-in-Suit claim patent ineligible subject matter in contravention of 35 U.S.C. § 101, AWS would, in essence, be arguing that the Amazon Patents suffer from a similar flaw.

In light of the problems created by the substantial identity between the claims in the Patents-in-Suit and the Amazon Patents, AWS is left to accuse ThroughPuter of wrongdoing while arguing that AWS invented the subject matter of the Patents-in-Suit. But that story makes no sense. The claims of ThroughPuter's Patents-in-Suit are fully supported at least by (i.e., described in) a patent application ThroughPuter filed in 2014—four years before the earliest of the Amazon Patents was published to the public. ThroughPuter could not have stolen its inventions from AWS when ThroughPuter disclosed the claimed inventions four years before the disclosure of the Amazon Patents was made public.

Despite AWS's invocation of incendiary accusations of misconduct, the reality is that ThroughPuter followed well-established, typical, and accepted practices in obtaining the Patents-in-Suit. AWS's suggestion to the contrary finds no basis in law or fact. Indeed, the only regulation AWS accuses ThroughPuter of violating does not even cover the Patents-in-Suit and would not have applied to ThroughPuter's prosecution even if it did. Moreover, as discussed *infra*, the Federal Circuit has expressly condoned the practice of using continuation applications to target competitive products as the market develops, which is precisely what ThroughPuter did in obtaining the Patents-in-Suit.

At bottom, AWS's Motion argues that the claims of the Patents-in-Suit find no basis in the specification of the Patents-in-Suit. As an initial matter, the Patent Office disagreed when it examined the Patents-in-Suit for that very issue, determined that the claims do have written

description support, and issued the Patents-in-Suit. And in any event, AWS's argument is really one that the Patents-in-Suit lack written description support under 35 U.S.C. § 112(a). Whether a patent includes written description support is a question of fact, which is not resolvable on a motion to dismiss.

Cognizant of that fact, AWS attempts to recast its written description argument as a lack of inventorship argument under 35 U.S.C. § 101. Tellingly, AWS does not cite a single case where any court anywhere found a lack of inventorship under § 101 as a basis for dismissal. The utter lack of support in AWS's Motion is telling: § 101 addresses patent eligibility, not inventorship. And even if § 101 did address inventorship, that factually intensive question is not resolvable at the motion to dismiss stage. The Court should deny AWS's Motion in its entirety.

## II. FACTUAL BACKGROUND

Plaintiff ThroughPuter is a technology start up founded and run by Mark Sandstrom, the named inventor of the Patents-in-Suit. Dkt. 1, ¶6. ThroughPuter is actively developing products that rely on the architecture disclosed in the Patents-in-Suit. *Id.*, ¶¶8-11. To protect its inventions, ThroughPuter sought patent protection and has obtained an international patent portfolio of over 50 patents, each naming Mr. Sandstrom as an inventor. *Id.*, ¶6. The Patents-in-Suit comprise two of those issued patents.

The Patents-in-Suit claim priority to two provisional applications, the first of which ThroughPuter filed in August 2013—**five years before** the disclosure of the Amazon Patents published to the public.<sup>1</sup> The Patents-in-Suit also claim priority to a non-provisional application filed June 2014—**four years before** the disclosure of the Amazon Patents published to the public. That non-provisional application includes the same specification as the Patents-in-Suit. While

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<sup>1</sup> While Amazon filed its first patent application that led to the issuance of the Amazon Patents in 2016, the contents of that application did not publish to the public until 2018.

AWS acknowledges, in passing, that ThroughPuter's 2014 application predates the filing date of the Amazon Patents by several years, AWS fails to state the key implication of this undisputed fact: ThroughPuter was the first to invent, and, accordingly, ThroughPuter's patents are prior art to the Amazon Patents. That is, ThroughPuter conceived of, and constructively reduced to practice, its claimed inventions some *four years before* the Amazon Patents published.

Despite these undisputed facts, AWS attempts to give the false impression that ThroughPuter somehow copied Amazon's inventions. The lynchpin of this argument is that, while the Amazon Patents are focused on an FPGA-enabled cloud computing system with security features, the ThroughPuter Patents-in-Suit have nothing to do with such a system. But that assertion is simply false. As explained below, ThroughPuter's 2013 and 2014 filings clearly disclose an FPGA-enabled cloud computing system that includes numerous benefits, including security benefits. As such, it was entirely appropriate and within ThroughPuter's rights to obtain the claims of the Patents-in-Suit. Indeed, as explained below, ThroughPuter followed all applicable Patent Office procedures and AWS's suggestions to the contrary have no basis in law or fact.

**A. In 2014, ThroughPuter filed a patent application disclosing an FPGA-enabled reconfigurable logic platform that would provide enhanced security, among other benefits.**

AWS focuses its argument on U.S. Application No. 14/318,512 (the "2014 Application"), which ThroughPuter filed in June 2014—four years before the Amazon Patents published. As AWS acknowledges, that application issued as U.S. Patent No. 9,448,847 on September 20, 2016—*i.e.*, before the earliest application of the Amazon Patents. According to AWS (at 3), the Amazon Patents "address security issues that arise when FPGAs are offered as part of a cloud



computing service.”<sup>2</sup> At the same time, AWS argues (at 13) that ThroughPuter’s patents, including the 2014 Application, are “directed to completely different subject matter.” That assertion is flatly belied by the disclosure of ThroughPuter’s 2014 Application. A brief review of ThroughPuter’s 2014 Application follows.

ThroughPuter’s 2014 Application starts by identifying a prior art problem in then-conventional cloud computing systems that embodiments of ThroughPuter’s disclosed inventions would solve, noting “significant challenges to the scalability of the networked utility (*‘cloud’*) computing model.” Dkt. 20-6, Motion Ex. E at 10, ¶003.<sup>3</sup> ThroughPuter’s 2014 Application continues: “To address the challenges per above, there is a need for inventions enabling scalable, multi-application dynamic concurrent execution on parallel processing systems, with high resource utilization efficiency, high application processing on-time throughput performance, as well [as] built-in, architecture based *security* and reliability.” *Id.* at ¶004. These same disclosures appear in the Patents-in-Suit. Dkt. 1-1, Complaint Ex. 1 at 2:9-24; Dkt. 1-2, Complaint Ex. 2 at 2:10-26.

ThroughPuter’s 2014 Application then explains that “aspects of the invention involve application-program instance specific hardware logic resources for *secure* and reliable ITC [inter-task communication] among tasks of application program instances hosted at processing stages of a multi-stage parallel processing system.” Dkt. 20-6, Motion Ex. E at 13, ¶0010. A cloud computing system is an example of a parallel-processing system. Alciati Decl., Ex. 1, 2014

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<sup>2</sup> Because AWS addresses its argument to security in an FPGA-based cloud computing system, ThroughPuter addresses this issue herein without conceding that such a focus is appropriate or ultimately relevant to the issues of infringement or validity in this case.

<sup>3</sup> All emphasis herein is added unless otherwise indicated.

Application, Appendix A at 2.<sup>4</sup> Thus, ThroughPuter's 2014 Application does disclose and discuss enhanced security features as part of the disclosed cloud computing system. AWS's contrary suggestion is inconsistent with the record.

ThroughPuter's earlier 2014 Application also discloses an embodiment, which uses "programmable logic (FPGA) implementation" in which "the core type for any core slot 520 is furthermore reconfigurable per expressed demands of its assigned app-task, e.g. per [1], Appendix A, Ch. 5.5." Dkt. 20-6, Motion Ex. E at 36, ¶0069. The 2014 Application's reference to "Appendix A, Ch. 5.5" refers to a 2014 provisional application, which is incorporated by reference into ThroughPuter's 2014 Application as well as the disclosure of the Patents-in-Suit. *Id.* at 9, [1]; Dkt. 1-1 at 1:21-22; Dkt. 1-2 at 1:22-23. That Appendix includes a detailed 51-page description of a functional cloud computing system designed by the named inventor on the Patents-in-Suit, including a detailed discussion of FPGAs.<sup>5</sup> See Alciati Decl., Ex. 1 at, *e.g.*, 39-43.

Despite ThroughPuter's clear and detailed description of the use of FPGAs in a cloud computing system, AWS claims (at 5) that ThroughPuter mentions FPGAs only as part of a "laundry list" of computer processors that could be used in connection with the disclosed cloud computing system. Thus, AWS implies that ThroughPuter's named inventor, Mark Sandstrom, knew very little about the use of FPGAs in a cloud computing system despite claiming them in the Patents-in-Suit. That, too, is incorrect.

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<sup>4</sup> ThroughPuter agrees with AWS that the Court can consider Patent Office filings that comprise the intrinsic record of the Patents-in-Suit in connection with AWS's Motion. See Dkt. 20 at 4, n. 3.

<sup>5</sup> For avoidance of doubt, no position taken herein is intended to reflect the arguments ThroughPuter would intend to make in the event AWS maintains its challenge to whether the claims of the Patents-in-Suit comply with 35 U.S.C. § 112(a) later in this proceeding.

Quite to the contrary, Mr. Sandstrom is so knowledgeable concerning FPGAs that he was asked to present at the FPGAworld Conference in Stockholm, Sweden in September 2014. Dkt. 1, ¶40. At that conference, he presented a paper he had published titled: “Hardware Implemented Scheduler, Placer, Inter-Task Communications and IO System Functions for Manycore Processors Dynamically Shared Among Multiple Applications.” *Id.* That paper is attached to the Complaint as Exhibit 10 and confirms the named inventor’s extensive knowledge concerning cloud computing and the security aspects of a cloud computing system, among other topics.

Mr. Sandstrom was also invited to present at other conferences including GigaOm in 2012 where ThroughPuter was selected as one of eleven finalists to present. Dkt. 1, ¶38. As another recognition of Mr. Sandstrom’s skill in the art of cloud computing, Mr. Sandstrom published an article in the Cloud Computing Journal. *Id.*, ¶39. A copy of that article is attached to the Complaint as Exhibit 9. Then, in 2015, ThroughPuter was invited to present at the HPC [High Performance Computing] Advisory Council Conference in Spain. *Id.*, ¶42. A copy of that presentation is attached to the Complaint as Exhibit 11. All of the foregoing occurred *before* Amazon filed the 2016 application that led to the Amazon Patents. In brief, AWS’s suggestion that ThroughPuter and its named inventor had little knowledge concerning FPGAs and cloud computing is entirely misplaced.

**B. ThroughPuter followed Patent Office procedure in filing the applications that matured into the Patents-in-Suit as confirmed by the Patent Office during examination.**

Unhappy with the fact that ThroughPuter’s 2014 Application disclosed an FPGA-enabled cloud computing system that supports the claims of the Patents-in-Suit, AWS resorts to accusing

ThroughPuter of wrong-doing in prosecuting the Patents-in-Suit.<sup>6</sup> As explained *infra*, AWS's argument is not properly raised at the motion to dismiss stage. Nonetheless, ThroughPuter responds here to correct the record and to demonstrate that ThroughPuter complied with all relevant Patent Office rules and procedures in prosecuting the Patents-in-Suit.

To accuse ThroughPuter of wrongdoing, AWS complains that ThroughPuter amended its Abstract, changed the title of its applications, allegedly added new matter when it filed its applications, allegedly offered claims without written description support, and allegedly concealed Amazon's patent filings from the USPTO. Each of these complaints lacks a basis in law and/or fact. As such, even if AWS's arguments were appropriate for consideration in the context of a motion to dismiss, AWS's arguments would fail. Each of AWS's arguments is addressed in turn below.

Starting with the Abstract, the Manual of Patent Office Examination and Procedure (the "MPEP") § 608.01(b) explains that 37 C.F.R. § 1.72 requires that a patent include an Abstract. MPEP § 608.01(b)(I)(B) further explains that an "abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains." Alciati Decl., Ex. 2 at page 600-138. Here, ThroughPuter's Abstract does exactly that. Indeed, MPEP § 608.01(b)(I)(D) clearly states that "review of the abstract for compliance with [USPTO] guidelines is the responsibility of the examiner." *Id.* Thus, the Examiner was required to—and presumptively did—review the Abstract to ensure that it contained a concise statement of the technical disclosure of the patent, including that which was new in the art to which the invention pertains. AWS's suggestion (at 6-7) that the Abstract is somehow inconsistent with the

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<sup>6</sup> For avoidance of doubt, ThroughPuter's Patents-in-Suit properly claimed priority to a 2013 provisional application. ThroughPuter's response focuses on the 2014 Application to respond to AWS's discussion of the same.

disclosure of the Patents-in-Suit is thus inconsistent with the USPTO's own determination during prosecution.

AWS's next complaint (at 6) is that ThroughPuter revised the title of the Patents-in-Suit during prosecution. That, too, is expressly permitted by USPTO rules. Specifically, MPEP § 606 explains that 37 C.F.R. § 1.72 requires that a patent include a title. According to the USPTO, "[t]he title should be brief but technically accurate and descriptive." Alciati Decl., Ex. 2 at page 600-119. MPEP § 606.01 further requires the Examiner to examine the title and "[w]here the title is not descriptive of the invention *claimed*, the examiner should require the substitution of a new title that is clearly indicative of the invention to which the *claims* are directed." *Id.* Thus, it is expected that different patents in the same family may have different titles particularly tailored to the specific claims presented in the patent. In the Patents-in-Suit, the claims are directed to a configurable logic platform, and therefore the Patents-in-Suit are appropriately titled "CONFIGURABLE LOGIC PLATFORM WITH RECONFIGURABLE PROCESSING CIRCUITRY." Here, again, the Examiner was required to—and presumptively did—ensure that the titles are clearly indicative of the invention to which the claims are directed.

AWS's next complaint (at 14) is that ThroughPuter allegedly introduced "new matter" because "ThroughPuter's amendments entirely replaced the titles, the abstracts and the claims of the asserted patents." AWS goes so far as to accuse ThroughPuter (at 14) of "expressly misrepresent[ing]" that it added no new matter. Here again, the Examiner is required to examine a continuation application to determine whether the application introduces new matter. If it does, then MPEP § 211.05 requires the Examiner to state that the application includes new matter and require the applicant to delete the claim that the application is a continuation of a prior application.

Alciati Decl., Ex. 3 at page 200-72. The Examiner issued no such rejection here, presumptively finding that the applications for the Patents-in-Suit did not introduce new matter.

While AWS accuses ThroughPuter of misrepresenting facts to the Patent Office, it is AWS that misrepresents what constitutes “new matter” in a patent application. The question of whether an application introduces “new matter” goes to whether a continuation application is entitled to the earlier filing date of the application to which it claims priority. *See Applied Materials, Inc. v. Advanced Semiconductor Materials America, Inc.*, 98 F.3d 1563, 1579-80 (Fed. Cir. 1996). If new matter is added, the claims are generally not entitled to the earlier filing date. *Id.* If no new matter is added, the later filed application is entitled to claim the priority benefit of the earlier filed application. *Id.*

Contrary to AWS’s argument, “new” matter does not mean “new” in the sense of something that appears that was not there before. Otherwise, all continuation applications would include “new” matter because such continuation applications always include claims that were not in the original application to which they claim priority. Instead, whether matter is “new” is judged against the disclosure of the prior application. And here, the Examiner was well aware of ThroughPuter’s amendments to the Title and Abstract and the newly presented claims and correctly determined that ThroughPuter’s applications did not introduce new matter because they were supported by the disclosure of ThroughPuter’s earlier filed applications.

AWS’s next complaint (at 13) is, allegedly, that the “complete absence of supporting disclosure in ThroughPuter’s parent applications confirms that ThroughPuter did not invent what it now claims to have invented.” As explained *infra*, this is an argument that the claims lack written description support under 35 U.S.C. § 112(a), which is not properly resolved on a motion to dismiss. This is not an argument under 35 U.S.C. § 101, which is the basis of AWS’s Motion.

Regardless, AWS again overlooks the fact that the Examiner was required to—and presumptively did—review the specification to ensure that it included written description support for the claims as drafted. In fact, the file histories for both of the Patents-in-Suit demonstrate that the Examiner did review the specification for compliance with § 112 as required by governing regulations. Alciati Decl. Ex. 4 at 9 ('556 Patent File History, Amendment dated February 28, 2022); Alciati Decl., Ex. 5 at 4 ('934 Patent File History, Amendment dated May 12, 2022). Specifically, the Examiner initially issued rejections under 35 U.S.C. § 112(b), (d), which ThroughPuter was able to overcome. *Id.*; *id.* But notably, the Examiner did not quibble with whether the claims found legally sufficient written description support in the specification. Indeed, by allowing the claims, the Examiner presumptively found that they did find sufficient written description support.

AWS's final complaint is (at 10) that ThroughPuter somehow concealed the Amazon Patents from the USPTO. As an initial matter, it bears repeating that the Amazon Patents are not prior art to ThroughPuter's patents—the converse is true. And regardless, AWS is forced to admit (at 10, n. 6) in a footnote that the face of the Patents-in-Suit cite to a publication of one of the applications that matured into the Amazon Patents. Indeed, AWS admits that ThroughPuter in fact cited one of the publications that led to the Amazon Patents to the Patent Office. ThroughPuter cannot reasonably be accused of concealing the existence of the Amazon Patents from the Patent Office when it cited one of the publications that led to the Amazon Patents to the Patent Office.

Despite the foregoing, AWS accuses ThroughPuter of failing to disclose that it allegedly copied claims from the Amazon Patents, citing 37 C.F.R. § 41.202(a) as requiring an applicant to disclose the source from where claims are copied. But § 41.202(a) on its face applies to an *interference proceeding*. An interference proceeding is a proceeding that applies to pre-America Invents Act ("AIA") patents that determines which of two parties that claim the same patentable

invention is entitled to priority of invention. *See Mayo Clinic Foundation v. Iancu*, 309 F.Supp.3d 425, 428 (E.D. Va. 2018). With the implementation of the America Invents Act, Congress eliminated interference proceedings for post-AIA patents. *Sanofi-Aventis v. Pfizer, Inc.*, 733 F.3d 1364, 1366 (Fed. Cir. 2013).

Importantly, ThroughPuter's Patents-in-Suit are post-AIA patents because the earliest claimed priority date is after March 16, 2013. *See Hamilton Beach Brands, Inc. v. f'real Foods, LLC*, 908 F.3d 1328, 1340, n. 4 (Fed. Cir. 2018). As such, the rule AWS accuses ThroughPuter of violating covers a proceeding that is not even available for the Patents-in-Suit. That said, even if interference proceedings could apply to the Patents-in-Suit, there would have been no need for ThroughPuter to provoke an interference because ThroughPuter's Patents-in-Suit enjoy a priority date that is three years prior to the Amazon Patents. Thus, AWS cites a rule that governs a proceeding that does not even exist for the Patents-in-Suit and that would not have been of any help to AWS here even if the proceedings had applied—all while accusing ThroughPuter of misrepresentation.

### III. ARGUMENT

#### A. Numerous questions of fact must be resolved before the written description arguments raised in AWS's Motion can be resolved.

AWS purports to bring a motion to dismiss under 35 U.S.C. § 101 arguing (at 13) that “[t]he complete absence of supporting disclosure in ThroughPuter's parent applications confirms that ThroughPuter did not invent what it now claims to have invented—Amazon did—and the Court should dismiss this case under § 101.” But questions concerning whether the specification demonstrates adequate disclosure to suggest that the named inventor invented what is claimed are governed by 35 U.S.C. § 112(a), not 35 U.S.C. § 101.



Indeed, AWS's argument that the specification of the Patents-in-Suit fails to show that ThroughPuter invented what is claimed closely tracks the test for whether a claim complies with the written description support requirement of § 112(a): "[T]he test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that ***the inventor had possession of the claimed subject matter as of the filing date.***" *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). "[T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art," and "[b]ased on that inquiry, the specification must describe an invention understandable to that skilled artisan and ***show that the inventor actually invented the invention claimed.***" *Id.* To be clear, these cases relate to the written description requirement under 35 U.S.C. § 112(a), not patent eligibility under 35 U.S.C. § 101, which is the purported subject of AWS's Motion.

Nonetheless, AWS attempts to pitch its argument under § 101 because it is presumably well aware that whether a patent claim finds adequate written description support in the specification is a question of fact. *Id.* Accordingly, the Federal Circuit has explained that "determining whether a patent complies with the written description requirement will necessarily vary depending on the context." *Id.* Indeed, "the level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology." *Id.* Given these factually-intensive inquiries, whether a claim complies with the written description requirement is simply not amenable to resolution on a motion to dismiss. *See Blackbird Tech LLC v. Service Lighting and Electrical*, Civ. No. 15-53-RGA, 2015 WL 12868236, at \*1 (D. Del. Dec. 1, 2015).

If AWS reasonably believes that the claims of the Patents-in-Suit do not comply with the written description requirement, it can assert that defense. The parties can then engage in

discovery, leading to expert reports and, eventually, submission to a jury. But what AWS cannot do is circumvent the proper analysis of the written description requirement by attempting to twist § 101 in an entirely unprecedented way to argue for dismissal. Indeed, it is telling that AWS did not cite a single case finding a patent claim ineligible under § 101 for a specification's failure to disclose that the inventor invented what is claimed—much less at the pleading stage.<sup>7</sup>

The reason for AWS's paucity of citation is that § 101 deals with eligibility, not patentability. The Federal Circuit has explained that it is "important to recognize that § 101, while far-reaching, only addresses patent *eligibility*, not overall *patentability*." *CLS Bank Intern. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1276 (Fed. Cir. 2013), *aff'd* 573 U.S. 208 (2014) (emphases in original). "The eligibility inquiry is not an inquiry into obviousness, novelty, enablement, or any other patent law concept." *Id.* at 1303.

The text of Section 101 itself makes this clear:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, ***subject to the conditions and requirements of this title***.

Thus, Section 101 makes certain types of inventions or discoveries eligible for patenting, so long as the invention or discovery meets the conditions and requirements to patentability set forth in Chapter 35 of the United States Code, including 35 U.S.C. §§ 102, 103, and 112.

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<sup>7</sup> While motions to dismiss under 35 U.S.C. § 101 are filed with some regularity, such motions generally focus on the Supreme Court's *Alice* framework for determining whether a patent claims an "abstract idea." See, e.g., *AML IP, LLC v. Bed Bath & Beyond, Inc.*, Civ. No. 6:21-cv-00600, 2022 WL 1085617, at \*3 (W.D. Tex. April 11, 2022). Even then, however, at least one court in this district has found that Section 101 issues require fact discovery and claim construction while noting that "because a patent is presumed valid and requires clear and convincing evidence to prove its invalidity, a Rule 12(b) motion to dismiss is a procedurally awkward place for a court to resolve a patent's § 101 eligibility." *Id.*

To that end, “[t]he Supreme Court repeatedly has cautioned against conflating the analysis of the conditions of patentability in the Patent Act with inquiries into patent eligibility.” *Id.* at 1303. Yet that is exactly what AWS asks the Court to do. The question AWS presents concerning whether the disclosure of ThroughPuter’s specification discloses that ThroughPuter invented what is claimed is an inquiry into whether the claims find adequate written description in the specification under 35 U.S.C. §112(a). In fact, one of the cases cited by AWS actually highlights that AWS’s invocation of § 101 is entirely misplaced.

AWS cites (at 11) *Application of Sarkar*, 588 F.2d 1330, 1333 (C.C.P.A. 1978) for the proposition that the words “‘Whoever invents’ in § 101 are used in the sense of ‘whoever originates.’” But that case actually demonstrates that § 101 is not directed to inventorship.<sup>8</sup> Just two sentences before AWS’s quoted sentence, the Court explained: “A § 101 determination is concerned (setting aside utility) *only* with whether the claimed invention is within the *Categories* there broadly enumerated.” *Id.* AWS’s Motion does not raise an eligibility issue concerning Section 101’s enumerated categories of eligible subject matter. Thus, AWS’s own cited authority demonstrates that AWS’s invocation of Section 101 is inapt in this context.

**B. Even if questions of inventorship were within the scope of 35 U.S.C. § 101, such questions are not resolvable at the motion to dismiss stage.**

As explained *supra*, Section 101 does not implicate an analysis of inventorship; however, even if it did, such questions are not appropriately resolved in the context of a motion to dismiss.

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<sup>8</sup> In a footnote, AWS cites (at 11, n. 7) to a journal article suggesting that, while the AIA eliminated 35 U.S.C. § 102(f), 35 U.S.C. § 101 embodies the derivation provisions of § 102(f). Even if that were correct, derivation is a question of fact and requires “the party asserting invalidity [to] prove both prior conception of the invention by another and communication of that conception to the patentee by clear and convincing evidence.” *Eaton Corp. v. Rockwell Int’l Corp.*, 323 F.3d 1332, 1344 (Fed. Cir. 2003). Any such derivation argument AWS intends to raise is not appropriately raised in the context of a motion to dismiss. Further, even if it were appropriately raised, as explained *supra*, the Patents-in-Suit claim priority to applications filed several years before AWS filed its application that resulted in the Amazon Patents.

“The ‘inventor,’ in patent law, is the person or persons who conceived the patented invention.” *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). Further, “[t]here is a presumption that the inventors named on an issued patent are correct, so misjoinder of inventors must be proven by clear and convincing evidence.” *Fina Oil and Chemical Co. v. Ewen*, 123 F.3d 1466, 1472 (Fed. Cir. 1997). The Federal Circuit has explained that “[c]onception is the touchstone to determining inventorship.” *Id.* “Thus facts relevant to inventorship are those showing the conception of the invention[.]” *C.R. Bard, Inc.*, 157 F.3d at 1352.

Here, however, conception was settled when ThroughPuter filed its patent applications that matured into the Patents-in-Suit because the “filing of a patent application serves as conception and constructive reduction to practice of the subject matter described in the application.” *Hyatt v. Boone*, 146 F.3d 1348, 1352 (Fed. Cir. 1998). Nonetheless, and to the extent AWS intends to argue that ThroughPuter did not conceive of the claimed inventions, the Court does not have an adequate record before it to decide that issue, which may involve claim construction, discovery, and expert testimony.

AWS’s Motion also fails because it is entirely plausible that Mr. Sandstrom invented what is claimed—consistent with the presumption of validity enjoyed by the Patents-in-Suit. As AWS acknowledges, ThroughPuter’s complaint alleges that Mark Sandstrom is “the sole and true inventor” of each of the asserted patents. Dkt. 1, ¶¶6, 63, 107. Nonetheless, AWS argues (at 13) that this is a legal conclusion not supported by any plausible factual allegations. In making this argument, AWS overlooks numerous other allegations that factually support that Mr. Sandstrom did, in fact, invent what is claimed.

For one thing, the USPTO issued the Patents-in-Suit with a presumption of validity to the effect that Mr. Sandstrom invented what is disclosed and claimed. For another, the complaint is

replete with facts demonstrating that Mr. Sandstrom certainly possesses a level of skill in the cloud computing field that would allow him to have invented what is claimed. As explained *supra* at Section II.A., Mr. Sandstrom published and spoke frequently on the topic of cloud computing and the use of reconfigurable FPGA processors to advance the cloud computing field. Dkt. 1, ¶¶38-42. That an individual of such accomplishments invented a reconfigurable cloud computing platform is entirely plausible.

In addition, ThroughPuter's complaint alleges:

To address these problems, ThroughPuter developed hardware implemented dynamic resource management functionality including a scheduler, placer, inter-task communications and input/output system for use with multicore processor arrays dynamically shared among multiple concurrent applications, preferably to be deployed on FPGA processors. To that end, in this technology approach, the manycore processor array involves a fabric of reconfigurable cores that can be on-demand programmed to supply the needed mix or match of hardware accelerators. ThroughPuter's technology provided a cloud computing solution that enables accelerated processing speeds across multiple application programs while at the same time optimizing processing resource utilization.

Dkt. 1, ¶36.

That ThroughPuter invented claims focused on the use of FPGA processors in a reconfigurable cloud computing platform is entirely plausible in view of this allegation, which must be accepted as true at the pleading stage.

AWS also argues that the Court can consider the file histories of the Patents-in-Suit in considering pleading motions. The file history, like the Complaint, is replete with evidence that supports that ThroughPuter's Mr. Sandstrom invented that which is claimed in the Patents-in-Suit. For example, the file history includes a 51-page technical specification of an FGPA-enabled cloud computing platform. That specification includes a detailed disclosure of the use of FPGAs in a cloud computing system. Alciati Decl., Ex. 1 at 43. Here, again, it is entirely plausible that an individual capable of devising such a detailed technical disclosure was capable of inventing that

which is claimed in the Patents-in-Suit. While AWS may disagree that ThroughPuter's patents disclose relevant details to demonstrate that Mr. Sandstrom invented what is claimed, that dispute is to be resolved much later in the case.

**C. ThroughPuter complied with all applicable USPTO requirements during prosecution of the Patents-in-Suit, and any argument by AWS to the contrary is not resolvable on a motion to dismiss.**

AWS's Motion is littered with accusations of misconduct levied against ThroughPuter. While it is clear that AWS does not like that ThroughPuter obtained claims—with a much earlier priority date—that are substantially identical in scope to the Amazon Patents, that does not mean that ThroughPuter failed to comply with applicable USPTO procedure. Quite to the contrary, as explained *supra* at Section II.B., ThroughPuter dutifully complied with USPTO requirements during prosecution of the Patents-in-Suit. In so doing, ThroughPuter was well within its rights to seek continuation patents claiming its disclosed inventions that cover AWS's accused product.

For example, the Federal Circuit has long condoned the use of continuation patents to specifically target a competitor as the technological field of the invention develops. To that end, the Federal Circuit has explained:

[T]here is nothing improper, illegal or inequitable in filing a patent application for the purpose of obtaining a right to exclude a known competitor's product from the market, nor is it in any manner improper to amend or insert claims intended to cover a competitor's product the applicant's attorney has learned about during the prosecution of a patent application. Any such amendment or insertion must comply with all statutes and regulations, of course, but, if it does, its genesis in the marketplace is simply irrelevant and cannot of itself evidence deceitful intent.

*Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 874 (Fed. Cir. 1988).

In fact, AWS's law firm published a client alert entitled "Strategic Use of Continuing Applications." *See* Alciati Decl., Ex. 6. In that alert, AWS's law firm extolls the benefits of

pursuing continuation applications specifically for the purpose of monitoring changes and developments in the marketplace:

Another benefit to this approach is the additional time taken to obtain the broader claims in the continuation *allows the client the opportunity to observe how the technology develops and to adapt the broader claims in an attempt to dominate the field as it matures. Careful monitoring of competitors' products and upcoming or recently accepted industry standards will identify opportunities for both prosecuting both broader [] and targeted [] claims.*

*Id.* at 1.

Consistent with Federal Circuit precedent and AWS's law firm's own legal bulletin, ThroughPuter's continuation applications that matured into the Patents-in-Suit were filed to cover AWS's accused product and to ensure that ThroughPuter protected the space it is entitled to protect. In doing so, ThroughPuter focused on the way Amazon claimed the accused product in patent applications. And so long as ThroughPuter's patents complied with the conditions for patentability—including the written description requirement—ThroughPuter was free to claim its invention as it saw fit.

Despite the provocative and incendiary language used throughout AWS's Motion to accuse ThroughPuter of wrongdoing, AWS has not identified any actual wrongdoing by ThroughPuter. As such, even if this were a relevant consideration to whether ThroughPuter had stated a claim for infringement—and it is *not*—AWS provides the Court with no basis to conclude that ThroughPuter's conduct was untoward. Instead, the record demonstrates that the USPTO examined ThroughPuter's applications for compliance with governing rules and the conditions for patentability, determined that the applications did so comply, and issued the Patents-in-Suit with a presumption of validity. AWS may well intend to attempt to rebut that presumption of validity. But its arguments to do so are not properly raised at the motion to dismiss stage.

**D. In the event the Court finds a pleading deficiency, ThroughPuter requests leave to amend.**

As explained herein, AWS's Motion falls well short of identifying a pleading deficiency in ThroughPuter's infringement case. Nonetheless, in the event the Court disagrees and finds that ThroughPuter's original complaint as drafted fails to state a claim for infringement, ThroughPuter respectfully requests leave to amend its pleading. *See Griggs v. Hinds Junior College*, 563 F.2d 179, 180 (5th Cir. 1977).

**IV. CONCLUSION**

For the foregoing reasons, ThroughPuter respectfully submits that the Court should deny AWS's Motion in its entirety.



Dated: January 26, 2023

Respectfully Submitted,

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**CERTIFICATE OF SERVICE**

The undersigned certifies that on January 26, 2023, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document through the Court's CM/ECF system.

/s/ W. Cook Alciati